



PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. **Application Number** 10/099,906-Conf. #3614 Filing Date TRANSMITTAL March 14, 2002 First Named Inventor **FORM** John H. Oates Art Unit 2631 (to be used for all correspondence after initial filing) Examiner Name J. A. Torres Attorney Docket Number 102323-0092 Total Number of Pages in This Submission ENCLOSURES (Check all that apply) After Allowance Communication x | Fee Transmittal Form Drawing(s) Appeal Communication to Board of x | Fee Attached Licensing-related Papers Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Petition Amendment/Reply Petition to Convert to a After Final **Proprietary Information Provisional Application** Power of Attorney, Revocation Affidavits/declaration(s) Status Letter Change of Correspondence Address Other Enclosure(s) (please **Extension of Time Request** Terminal Disclaimer Identify below): Return Receipt Postcard (in **Express Abandonment Request** Request for Refund duplicate) Check in the amount of \$180.00 x | Information Disclosure Statement CD, Number of CD(s) Publications as cited herein Certified Copy of Priority Landscape Table on CD Document(s) Reply to Missing Parts/ Remarks Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name NUTTER MCCLENNEN & FISH LLP Signature Printed name David J. Powsner Date Reg. No.

Transmittal	
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U	
the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commission	ner for Patents, P.O.
Box 1450, Alexandria, VA 22313-1450.	,
Dated: 5 46 06 Signature: (David J. Powsner)	

31.868



PTO/SB/17 (12-04v2)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Effective on 12/08/2004.			Complete if Known				
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).			Application Nu	mber	10/099,906-C	onf. #3614	
FEE TRANSMITTAL			Filing Date		March 14, 20	02	
For FY 2005			First Named In		John H. Oate	S	
	Examiner Name	•	J. A. Torres				
Applicant claims small entity status. See 37 CFR 1.27			Art Unit		2631		
TOTAL AMOUNT OF PAYMENT (\$) 180.00 Attorney Docket No. 102323-0092							
METHOD OF PAYMEN	IT (check all t	hat apply)					
x Check Credit Card Money Order None Other (please identify):							
Deposit Account Dep	osit Account Numb	er: 141449 Deposit A	ccount Name:				
For the above-iden	tified deposit	account, the Director	is hereby authoriz	ed to: (ch	eck all that apply)	
Charge fee(s) indicated be	low	Charg	ge fee(s) i	ndicated below,	except for th	ne filing fee
		s) or underpayment o	of X Credi	t any over	payments		
FEE CALCULATION	37 CFR 1.16	and 1.17			*****		
1. BASIC FILING, SEARC	H, AND EXAM	MINATION FEES					
		G FEES S	EARCH FEES		INATION FEES	3	
Application Type	Fee (\$)	Small Entity Fee (\$) Fee	Small Entity (\$) Fee (\$)	Fee (\$	Small Entity) Fee (\$)	Fees F	Paid (\$)
Utility	300	150 50		200	100		
Design	200	100 10		130	65	.	
Plant	200	100 30		160	80	•	
Reissue	300	150 50		600	300		
Provisional	200		0 0	0	0	-	
2. EXCESS CLAIM FEES	200	100	0	v	v		Small Entity
Fee Description						Fee (\$)	Fee (\$)
Each claim over 20 (include Each independent claim or	-					50	25
Multiple dependent claims	•	ig Keissues)				200 360	100 180
• •		(t) For	Daid (\$)		Multiple Depon		
	Claims F		Paid (\$)		<u>Multiple Depend</u> Fee (\$)	Fee Paid (\$	
Indep. Claims Extra	Claims F	ee (\$) Fe	e Paid (\$)		 .		
-=	x	=					
3. APPLICATION SIZE FE							
If the specification and d listings under 37 CFR	rawings exceed 1.52(e)), the	ed 100 sheets of paper application size fee	er (excluding elect due is \$250 (\$125	ronically for small	filed sequence o entity) for each	r computer additional 5	0
sheets or fraction ther	eof. See 35 U	I.S.C. 41(a)(1)(G) ar	d 37 CFR 1.16(s)	•			
Total Sheets	Extra Sheets	Number of eacl	additional 50 or fra	action ther	eof Fee (\$)	<u>Fee</u>	Paid (\$)
	<u></u>	/50	(round up to a wh	ole numbe	r) ×	=	
4. OTHER FEE(S)						<u>Fees</u>	Paid (\$)
Non-English Specificat					_		
Other (e.g., late filing s	surcharge): 18	306 Submission of	an Information [Disclosur	e Statement	18	30.00
SUBMITTED BY							
Signature	(>//		Registration No. (Attorney/Agent)	31,868	3 Telephone	(617) 43	9-2000
Name (Print/Type) David J.	Powsner				Date 5	18106)
<u> </u>						· · · · · ·	

Fee Transmittal
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Dated: Signature:

Docket No.: 102323-0092

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

John H. Oates

Application No.: 10/099,906

Confirmation No.: 3614

Examiner: J. A. Torres

Filed: March 14, 2002 Art Unit: 2631

For: WIRELESS COMMUNICATION SYSTEMS

AND METHOD FOR LONG-CODE

COMMUNICATIONS FOR

REGENERATIVE MULTIPLE USER DETECTION INVOLVING IMPLICIT

WAVEFORM SUBTRACTION

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the publications listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the publications be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

05/15/2006 AKELECH1 00000002 10099906

01 FC:1806

180.00 OP

Application No.: 10/099,906 Docket No.: 102323-0092

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in § 1.56 (b).

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed publications.

Our check in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p) is enclosed. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 141449, under Order No. 102323-0092.

Dated: 5/6/06

Respectfully submitted,

By David J. Powsner

Registration No.: 31,868

NUTTER MCCLENNEN & FISH LLP

World Trade Center West 155 Seaport Boulevard

Boston, Massachusetts 02210-2604

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Attorney for Applicant

Attorney Docket No.: 102323-0092

Application No. (if known): 10/099,906

Certificate of Mailing under 37 CFR 1.8

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(617) 439-2717

Registration Number, if applicable

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IDS (Citation) by Applicant (2 pages)

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Substitute for form 1449A/B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 1 of

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ostitute for form 1449A/B/PTO			Complete if Known			
			Application Number	10/099,906-Conf. #3614		
IFORMATION DISCLOSURE			Filing Date	March 14, 2002		
TATEMEN	T BY	APPLICANT	First Named Inventor John H. Oates			
			Art Unit	2631		
(Use as man	y sheets as	s necessary)	Examiner Name	J. A. Torres		
1	of	1	Attorney Docket Number	102323-0092		

	U.S. PATENT DOCUMENTS					
Examin er	Cite	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
Initials*	No. ¹	Number-Kind Code ² (if known)		, ,	Figures Appear	
	AA*	US-6,018,317	01-25-2000	Dogan et al.		
	AB*	US-6,370,130	04-09-2002	Zhou et al.		
	AC*	US-6,570,864	05-27-2003			
	AD*	US-6,801,565	10-05-2004			
	AE*	US-6,842,480	01-11-2005	*		
	AF*	US-6,154,443	11-28-2000	Huang et al.		
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	AJ*	US-6,782,036	08-24-2004			
	AK*	US-5,757,791	05-26-1998			
	AL*	US-6,127,973	10-03-2000	Choi et al.		
ļ <u> </u>	AM*	US-2004/0213329A1	10-28-2004			
	AN	US-2002/0118728A1	09-29-2002			
<u> </u>	AO	US-2003/0058929A1	03-27-2003			
	AP	US-2003/0206577A1	11-06-2003			
	AQ	US-2002/0122392	09-05-2002			
	AR*	US-2003/0091058	05-15-2003	Oates		
	AS*	US-2003/0103558	06-05-2003	Oates		
	AT*	US-2003/0099225	05-29-2003	Oates		
	AU*	US-2003/0099224	05-29-2003	Oates		
	AV*	US-2003/0091106	05-15-2003	Oates		
	AW*	US-2003/0076875	04-23-2003	Oates		
	AX*	US-2003/0091102	05-15-2003	Oates		
	AY*	US-2003/0202566	10-30-2003	Oates		
	AZ*	US-2003/0198197	10-23-2003	Oates		
	AA1*	US-2003/0202559	10-30-2003	Oates		
	AB1*	US-2003/0128739	07-10-2003	Oates		
	AC1*	US-2003/0191887	10-09-2003	Oates		
	AD1*	US-2003/0231702	12-18-2003	Oates		
	AE1*	US-6,697,973	02-24-2004	Baumeister, IV et al.		
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	AG1*	US-6,948,100	09-20-2005			
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	Al1*	US-6,311,296	10-30-2001	Congdon		
	AJ1*	US-6,518,980	02-11-2003	DeMotte et al.		
	AK1*	US-6,014,408	01-11-2000	Naruse et al.		
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	AP1*	US-6,282,233	08-28-2001	Yoshida		
	AQ1*	US-20020051433-A1	12-13-2005	Affes et al.		
	AR1*	US-20010053177-A1	12-20-2001	Papasakellariou		
	AS1*	US-6,470,000	10-22-2002	Burns et al.		

Examiner	Date	
Signature	 Considered	



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Complete if Known Substitute for form 1449A/B/PTO Application Number 10/099,906-Conf. #3614 INFORMATION DISCLOSURE Filing Date March 14, 2002 STATEMENT BY APPLICANT First Named Inventor John H. Oates Art Unit 2631 (Use as many sheets as necessary) Examiner Name J. A. Torres 1 1 Sheet of 102323-0092 Attorney Docket Number

AT1*	US-6,816,541	11-09-2004	Schmidl	
AU1*	US-6,546,026	04-08-2003	Goeddel	
 AV1*	US-5,576,715	11-19-1996	Litton et al.	
AW1*	US-5,812,843	09-22-1998	Yamazaki et al.	
AX1*	US-5,809,262	09-15-1998	Potter	
AY1*	US-6,161,209	12-12-2000	Moher et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	BA	DE-198 41 578 A1	03-16-2000			
	BB	EP-0 982875 A2	01-03-2000			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. 'Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
	CA	Microsoft Corporation, Microsoft Computer Dictionary, 2002, Microsoft Press, Fifth Edition, pages 326 and 419.				
	СВ	S.L. Miller and A. N. Barbosa, "A Modified MMSE Receiver for Detection of DS-CDMA Signals in Fading Channels", 1996, IEEE, Proc. MILCOM '96, pp. 898-902.				
	CC	Verdu, "Multiuser Detection", 1998, Cambridge, pp19-66; 154-213.				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	 Considered	

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.